

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
16 June 2005 (16.06.2005)

PCT

(10) International Publication Number
WO 2005/054288 A1

(51) International Patent Classification⁷: **C07K 14/565**

(21) International Application Number:
PCT/KR2004/003179

(22) International Filing Date: 4 December 2004 (04.12.2004)

(25) Filing Language: Korean

(26) Publication Language: English

(30) Priority Data:
10-2003-0087552
4 December 2003 (04.12.2003) KR

(71) Applicant (for all designated States except US): **CJ CORPORATION** [KR/KR]; 500 Namdaemunro5-ga, Jung-gu, Seoul 100-749 (KR).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **PARK, Ji-Sook** [KR/KR]; 101-801 Shiyeong Apt., Junggye-dong, Nowon-gu, Seoul 139-220 (KR). **CHUNG, Jong-Sang** [KR/KR]; 302-1107 Mido Apt., Banpo4-dong, Seocho-gu, Seoul 137-769 (KR). **BAEK, Min-Ji** [KR/KR]; 106-101 Hyundai Apt., Gimryangjang-dong, Yon-gin-city, Kyungki-do 449-709 (KR). **AHN, Jee-Won**

[KR/KR]; 249-602 Olympic Seonsuchon Apt. 2danji, Oryun-dong, Songpa-gu, Seoul 138-787 (KR). **KIM, Ki-Wan** [KR/KR]; 101-208 Sungwon Apt. 740 Yeonhui-dong, Seodaemun-gu, Seoul 120-110 (KR). **PARK, Hyung-Ki** [KR/KR]; Rm. 401, Sangji Ritz Ville, 1490-3 Seocho3-dong, Seocho-gu, Seoul 137-073 (KR). **LEE, Dong-Eok** [KR/KR]; 10-807 Plaza Apt., Garak2-dong, Songpa-gu, Seoul 138-162 (KR). **OH, Myung-Suk** [KR/KR]; 651-806 Miju Apt., Youngtong-dong, Paldal-gu, Suwon-city, Kyungki-do 442-470 (KR).

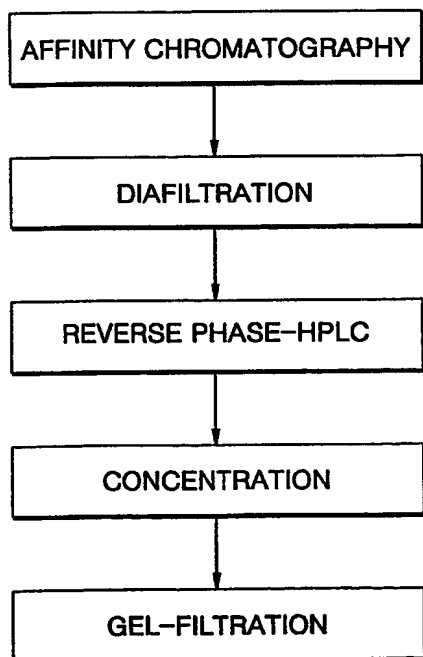
(74) Agent: **LEE, Young-Pil**; The Cheonghwa Bldg. 1571-18 Seocho-dong, Seocho-gu, Seoul 137-874 (KR).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH,

[Continued on next page]

(54) Title: PROCESS FOR PURIFYING INTERFERON BETA



(57) Abstract: Provided is a process for purifying human interferon beta from a recombinant human interferon beta-containing culture comprising performing affinity chromatography and reversed-phase high-performance liquid chromatography (RP-HPLC), wherein the affinity chromatography includes: adsorbing the interferon beta-containing culture to an equilibrated affinity chromatography column, followed by washing with an equilibration buffer solution; washing the column with a washing buffer solution A of pH 6.5-7.5 containing 30-60 wt% of propylene glycol and a washing buffer solution B of pH 6.5-7.5 containing 10-30 wt% of propylene glycol and 1-2M NaCl; and eluting a human interferon beta-containing fraction with a buffer solution of pH 6.5-7.5 containing 40-60 wt% of propylene glycol and 1-2M NaCl.

WO 2005/054288 A1



GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— *with international search report*

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.